



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/824,445

04/15/2004

Kyung-Shik Lee

1572.1199

6610

21171 7590 07/21/2008

STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

TAN, ALVIN H

ART UNIT

PAPER NUMBER

2173

MAIL DATE

DELIVERY MODE

07/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/824,445	Applicant(s) LEE ET AL.	
	Examiner ALVIN H. TAN	Art Unit 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/14/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. This Office action is responsive to the Request for Continued Examination (RCE) filed under 37 CFR §1.53(d) for the instant application on 4/14/08. Applicants have properly set forth the RCE, which has been entered into the application, and an examination on the merits follows herewith.

Claims 1-30 have been examined and rejected. This Office action is responsive to the amendment filed on 2/15/08, which has been entered in the above identified application.

Drawings

2. The replacement sheet for Figures 2, 18, and 19 submitted on 2/15/08 have been considered and are entered into the application. The objections to the drawings as failing to comply with 37 CFR 1.84(p)(5) have been withdrawn.

Specification

3. The disclosure is objected to because of the following informalities:
- a. On *[paragraph 97, line 1]*, Examiner suggests changing "brightness adjusting window 251" to --contrast adjusting window 251--.
- Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 7, 22, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Narui (U.S. Patent No. 6,278,433 B2).

5-1. Regarding claims 1, 22, and 29, Narui teaches a user interface to change a display setting of a picture area of a display apparatus, which communicates with an external device, by disclosing a method for adjusting a monitor having a screen [*column 1, lines 46-53*]. The monitor is connected to a computer [*figure 1*].

Narui teaches the claim comprising executing a display setting program according to a user, displaying a main window in response to the executing according to the user, including a step start button to initiate a sequence of at least first and second display setting adjustment windows in which first and second display setting adjustments are made and sequentially displaying the display setting adjustment windows corresponding to a selection of the step start button, by disclosing a setup wizard window to begin setup of the monitor. This is invoked when a user boots up the computer system or when the user has changed a monitor parameter [*column 3, lines 19-23, 24-32; figure 3*]. The setup includes a sequence of windows [*figures 4-8*].

Narui teaches adjusting the display setting through the displayed display setting adjustment windows, by disclosing that adjustments to the monitor may be made using the setup *[column 1, lines 48-53]*.

Narui teaches issuing a command from the external device in correspondence to adjusting the displayed display setting adjustment windows and setting the display setting in correspondence to the command, by disclosing that during the setup process, the processing unit of the computer signals the monitor to adjust its settings according to the user's preferences *[column 2, lines 50-55; column 4, lines 3-15]*.

As per claim 22, the display apparatus must inherently contain a microprocessor in order to display the wizard window.

5-2. Regarding claim 7, Narui teaches the claim wherein at least one of the display setting adjustment windows comprise an undo button to undo the display setting adjustment, by disclosing a cancel button as shown in *[figures 5A-7A]*.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2) and Fukumoto et al (Pub. No. US 2002/0054146 A1).

7-1. Regarding claims 2 and 30, Narui teaches the claim as recited in claims 1 and 29 respectively. Narui does not expressly teach the claim wherein the main window includes a menu button to separately adjust the display settings. Fukumoto teaches a hierarchical menu that displays adjustable items on a screen for making adjustments to audio-visual equipment comprising a display *[paragraph 1]*. This allows users to be able to select a specific item to adjust. Since Narui teaches adjusting a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the hierarchical menu as taught by Fukumoto. This would allow users to select a specific item to adjust rather than having to step through each item.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2) and Naito (U.S. Patent No. 6,693,629 B1).

8-1. Regarding claim 3, Narui teaches the claim as recited in claim 1. Narui further teaches the claim wherein the display setting adjustments are selected from a picture position adjustment, resolution adjustment, contrast adjustment, and brightness adjustment, by disclosing that the basic set up process adjusts the monitor parameters

including resolution, brightness, size, center position, and tilt position [*column 3, lines 43-49*].

Narui does not expressly teach a color temperature adjustment and a clock and phase adjustment. Naito teaches allowing users to adjust and save settings for a display device [*column 2, line 62 to column 3, line 3*]. Users can adjust parameters including clock and phase, position, contrast, brightness, and color [*column 8, lines 27-38*]. This allows users to adjust the image quality of the display device as they see fit. Since Narui teaches adjusting a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include options to adjust a color and clock and phase adjustment, as taught by Naito. This would give the users additional settings for adjusting the image quality of the display device as they see fit.

9. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2), McLaughlin et al (U.S. Patent No. 5,739,809), and Applicant's admission of prior art.

9-1. Regarding claim 4, Narui teaches the claim as recited in claim 1. Although Narui teaches storing a monitor ID for the adjusted monitor in a file at the end of the sequence [*column 6, line 59 to column 7, line 3*], Narui does not expressly teach saving the adjusted display settings. McLaughlin teaches a method and apparatus for calibrating a display device [*column 1, lines 10-16*] and saving the calibrations in separate data files so that the user can retrieve and edit selected ones of the data files [*column 3, lines 31-*

40]. This allows the user to store a set of adjustment data and later retrieve the stored data for use in modifying a prestored base set of display control parameters [column 16, lines 29-36]. Since Narui teaches adjusting a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include storing the adjusted display settings as a file and being able to open the files to adjust a display setting on the basis of the saved adjusted display setting in the opened file, as taught by McLaughlin. This would allow the user to store a set of adjustment data and later retrieve the stored data for use in modifying a prestored base set of display control parameters.

Narui and McLaughlin do not expressly teach wherein a last display setting adjustment window in the sequence includes a button to open an adjustment save window to save adjusted display settings. The statement that it is common for programs to include a save menu button for opening a save window to save program data is taken to be admitted prior art because Applicant has failed to traverse the Examiner's assertion of official notice. See MPEP 2144.03 C. Save menu buttons can be seen in many commonly used Windows applications such as Microsoft Word and Microsoft Excel. This provides users with an intuitive way to save data to a file. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a button to open a save window to save the adjusted display settings since Applicant admits that it is common for programs to include a save menu button for opening a save window to save program data. Such a menu button would provide the user with an intuitive way to save data to a file.

9-2. Regarding claim 5, Narui and McLaughlin teach the claim further comprising saving the adjusted display settings as a file through the adjustment save window *[McLaughlin, column 3, lines 31-40]*.

9-3. Regarding claim 6, Narui and McLaughlin teach the claim further comprising opening the file and adjusting a display setting on the basis of the saved adjusted display setting in the opened file, by disclosing that the user can retrieve and edit the saved data files *[column 3, lines 31-40]*.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2) and Hidetoshi (JP 09-281942).

10-1. Regarding claim 8, Narui teaches the claim as recited in claim 1. Narui does not expressly teach a reset button to return the display setting to a default setting. Hidetoshi teaches screen adjustment for display devices *[paragraph 1]*. A reset button is provided that cancels any adjustments made and returns screen settings to a standard value *[paragraph 13]*. This allows users to restore default screen settings. Since Narui teaches adjusting a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reset button for returning the display setting to a default setting, as taught by Hidetoshi. This is useful in cases where

a user wishes to cancel any adjustments made and restore the screen settings to a default setting.

11. Claims 9-11, 14, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2), Fukumoto et al (Pub. No. US 2002/0054146 A1), Naito (U.S. Patent No. 6,693,629 B1), and McLaughlin et al (U.S. Patent No. 5,739,809).

11-1. Regarding claim 9, Narui and Fukumoto teach the claim as recited in claim 1. Narui and Fukumoto further teach a plurality of menu buttons comprising a display button and a geometry button wherein when each menu button is selected, a window to adjust the display setting belonging to the corresponding setting group is opened, by disclosing that the menu is organized in a way that groups related items together. As shown in *[Fukumoto, figure 2]*, separate menus are displayed that relate to the display (image quality) and geometry (image quality mode) of the display device. Providing the hierarchical menu and grouping the items in this way allows users to be able to more intuitively select a specific item to adjust. Although the image quality menu of Fukumoto teaches a brightness setting, it does not explicitly teach a resolution and contrast setting. However, Fukumoto does teach allowing the user to customize menus in whatever way the user sees fit as shown in *[Fukumoto, figures 7A-7C]*. The list of settings provided for selection relate to adjustable settings for a display. It would have been obvious to one of ordinary skill in the art to include other types of adjustable

settings in the list such as resolution and contrast, since Narui teaches providing these settings were common when adjusting a display. Such a combination would yield a predictable result. Thus, settings for the resolution, brightness, and contrast of Narui would be grouped together in a menu. This would allow users to more intuitively select a specific item to adjust rather than having to step through each item.

Narui and Fukumoto do not expressly teach the display button including a clock and phase setting. Naito teaches allowing users to adjust and save settings for a display device [*column 2, line 62 to column 3, line 3*]. Users can adjust parameters including clock and phase [*column 8, lines 27-31*]. This gives the user an additional setting for adjusting the image quality of the display device. Since Narui and Fukumoto teach adjusting a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the menu relating to the display, a clock and phase adjustment, as taught by Naito. This would give the users an additional setting for adjusting the image quality of the display device as they see fit.

Narui, Fukumoto, and Naito do not expressly teach a color button corresponding to a third setting group including a calibration setting and a color temperature setting. McLaughlin teaches a method and apparatus for calibrating a display device [*column 1, lines 10-16*]. A color button item relating to adjusting color is provided [*figure 3; column 9, line 56 to column 11, line 7*]. This provides the user with an additional setting for adjusting the display device. Since Narui, Fukumoto, and Naito teach adjusting a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the hierarchical menu, a color button for adjusting

a calibration setting and a color temperature setting, as taught by McLaughlin. This provides the user with an additional setting for adjusting the display device.

11-2. Regarding claim 10, Narui, Fukumoto, Naito, and McLaughlin teach the claim wherein when the display button is selected, a display adjusting window is opened, the display adjusting window comprising a resolution button corresponding to the resolution setting, a brightness button corresponding to the brightness setting, a contrast button corresponding to the contrast setting, and a picture setup button corresponding to the clock and phase setting, is opened, by disclosing that when the image quality menu button is selected from the main menu, an image quality submenu is displayed on the screen along with buttons to allow users to adjust the items contained within the submenu [*Fukumoto, paragraphs 35-37*]. As discussed in section 18-1, the image quality submenu would contain a resolution, brightness, contrast, and clock and phase adjustment setting.

11-3. Regarding claim 11, Narui, Fukumoto, Naito, and McLaughlin teach the claim wherein when one of the buttons is selected, an adjusting window, in which a display setting adjustment corresponding to the selected button is made, is opened, by disclosing opening windows to adjust a display setting [*McLaughlin, figures 5-8*]. Rather than adjusting values within the submenu, opening a new window to adjust display settings allows more screen real estate for providing various controls in making the adjustment. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to open an adjusting window when one of the buttons is selected, as taught by McLaughlin. This would allow more screen real estate for providing various controls in making the adjustment.

11-4. Regarding claim 14, Narui, Fukumoto, Naito, and McLaughlin teach the claim wherein when the geometry button is selected, a geometry setting window, including a position button, corresponding to the second setting group, is opened, by disclosing image quality mode submenu including buttons to allow users to adjust the position of the display device [*Fukumoto, figure 2*].

11-5. Regarding claim 17, Narui, Fukumoto, Naito, and McLaughlin teach the claim wherein when the color button is selected a color adjusting window, including a calibration button corresponding to a calibration setting and a color temperature button corresponding to a color temperature of the picture displayed by the display apparatus, is opened, by disclosing that the hierarchical menu would have a color button item relating to adjusting a calibration setting and color temperature as discussed in section 18-1.

11-6. Regarding claim 18, Narui, Fukumoto, Naito, and McLaughlin teach the claim wherein when a user selects the color temperature button, a color temperature adjusting window, in which a color temperature of a picture displayed by the display apparatus is adjusted, is opened, by disclosing a color button item relating to adjusting color is

provided that, when selected, opens a window for adjusting color settings [*McLaughlin, figures 3, 6; column 9, line 56 to column 11, line 7*].

11-7. Regarding claim 20, Narui, Fukumoto, Naito, and McLaughlin teach the claim wherein the adjusting window comprises an undo button to undo a color temperature adjustment, by disclosing a cancel button that returns any adjusted values to their previously saved values [*McLaughlin, column 11, lines 8-14*].

Narui, Fukumoto, Naito, and McLaughlin teach an animation window to show an animation of a color temperature adjustment, by disclosing that the main display displays current settings of the color as they are adjusted by the user [*McLaughlin, column 10, lines 29-32*].

Although Narui, Fukumoto, Naito, and McLaughlin teach providing recommended adjustments to the various settings of the display device [*Narui, column 3, lines 33-35*]. Since color temperature is one of the settings adjustable by the user [*McLaughlin, column 15, lines 21-36*], it would have been obvious to one of ordinary skill in the art to include displaying recommended values, as taught by Narui, for color temperature.

12. Claims 12, 15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2), Fukumoto et al (Pub. No. US 2002/0054146 A1), Naito (U.S. Patent No. 6,693,629 B1), McLaughlin et al (U.S. Patent No. 5,739,809), and Yamamoto (U.S. patent No. 6,343,147 B2).

Art Unit: 2100

12-1. Regarding claim 12, Narui, Fukumoto, Naito, and McLaughlin teach the claim as recited in claim 11. Narui, Fukumoto, Naito, and McLaughlin do not expressly teach wherein the adjusting window comprises a pattern activating button to open a pattern window having an image which is changed as the display setting adjustment are made in the adjusting window. Yamamoto teaches an image processing method and apparatus for adjusting settings of an image [*column 2, lines 27-32*]. Users can adjust settings of the monitor and preview the adjusted settings [*figures 7, 6*]. This allows the user to preview settings before confirming them. Since Narui, Fukumoto, Naito, and McLaughlin teach adjusting settings of a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a button for opening a preview window having an image that is changed based on adjustments made on the settings of the display, as taught by Yamamoto. This would allow users to preview settings before confirming them.

12-2. Regarding claim 15, Narui, Fukumoto, Naito, and McLaughlin teach the claim as recited in claim 14. Narui, Fukumoto, Naito, and McLaughlin do not expressly teach wherein the adjusting window comprises a pattern activating button to open a pattern window having a picture which is changed as the display setting adjustment are made in the adjusting window. Yamamoto teaches an image processing method and apparatus for adjusting settings of an image [*column 2, lines 27-32*]. Users can adjust settings of the monitor and then preview the adjusted settings [*figures 7, 6*]. This allows the user to preview settings before confirming them. Since Narui, Fukumoto, Naito, and McLaughlin

Art Unit: 2100

teach adjusting settings of a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a button for opening a preview window having a picture that is changed based on adjustments made in the adjustment window, as taught by Yamamoto. This would allow users to preview settings before confirming them.

12-3. Regarding claim 19, Narui, Fukumoto, Naito, and McLaughlin teach the claim as recited in claim 18. Narui, Fukumoto, Naito, and McLaughlin do not expressly teach wherein the color temperature adjusting window comprises a pattern activating button, wherein when the pattern activating button is selected, a color temperature pattern window, having a picture with a color temperature that is changed as the color temperature is adjusted in the color temperature adjustment window, is opened.

Yamamoto teaches an image processing method and apparatus for adjusting settings of an image [*column 2, lines 27-32*]. Users can adjust settings of the monitor, including color temperature, and then preview the adjusted settings [*figures 7, 6*]. This allows the user to preview settings before confirming them. Since Narui, Fukumoto, Naito, and McLaughlin teach adjusting settings of a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a button for opening a preview window having a picture with a color temperature that is changed as the color temperature is adjusted in a color temperature adjusting window, as taught by Yamamoto. This would allow users to preview settings before confirming them.

13. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2), Fukumoto et al (Pub. No. US 2002/0054146 A1), Naito (U.S. Patent No. 6,693,629 B1), McLaughlin et al (U.S. Patent No. 5,739,809), and Hidetoshi (JP 09-281942).

13-1. Regarding claim 13, Narui, Fukumoto, Naito, and McLaughlin teach the claim as recited in claim 11. Narui, Fukumoto, Naito, and McLaughlin further teach wherein the adjusting window comprises an undo button to undo the display setting adjustment, by disclosing a cancel button as shown in *[Narui, figures 5A-6]*.

Narui, Fukumoto, Naito, and McLaughlin teach an animation window to show an animation of the display setting adjustment, by disclosing that the main display displays current settings such as brightness and contrast as they are adjusted by the user *[McLaughlin, column 9, lines 35-40]*.

Narui, Fukumoto, Naito, and McLaughlin do not expressly teach a reset button to return the display setting to a default setting. Hidetoshi teaches screen adjustment for display devices *[paragraph 1]*. A reset button is provided that cancels any adjustments made and returns screen settings to a standard value *[paragraph 13]*. This allows users to restore default screen settings. Since Narui, Fukumoto, Naito, and McLaughlin teach adjusting a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reset button for returning the display setting to a default setting, as taught by Hidetoshi. This is useful in cases where a user

wishes to cancel any adjustments made and restore the screen settings to a default setting.

13-2. Regarding claim 16, Narui, Fukumoto, Naito, and McLaughlin teach the claim as recited in claim 14. Narui, Fukumoto, Naito, and McLaughlin further teach wherein the adjusting window comprises an undo button to undo a position adjustment, by disclosing a cancel button as shown in *[Narui, figures 7A]*.

Narui, Fukumoto, Naito, and McLaughlin teach an animation window to show an animation of the display setting adjustment, by disclosing that the main display displays current settings of the position as they are adjusted by the user *[McLaughlin, column 12, lines 54-58]*.

Narui, Fukumoto, Naito, and McLaughlin do not expressly teach a reset button to return the display setting to a default setting. Hidetoshi teaches screen adjustment for display devices *[paragraph 1]*. A reset button is provided that cancels any adjustments made and returns screen settings to a standard value *[paragraph 13]*. This allows users to restore default screen settings. Since Narui, Fukumoto, Naito, and McLaughlin teach adjusting a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reset button for returning the display setting to a default setting, as taught by Hidetoshi. This is useful in cases where a user wishes to cancel any adjustments made and restore the screen settings to a default setting.

14. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2), Fukumoto et al (Pub. No. US 2002/0054146 A1), Naito (U.S. Patent No. 6,693,629 B1), McLaughlin et al (U.S. Patent No. 5,739,809), and Applicant's admission of prior art.

14-1. Regarding claim 21, Narui, Fukumoto, Naito, and McLaughlin teach the claim as recited in claim 9. Narui, Fukumoto, Naito, and McLaughlin further teach wherein the menu further comprises addition buttons for opening additional option and support windows, by disclosing the hierarchical menu as shown in *[Fukumoto, figure 2]*. The main menu contains a various setting button that allows users to further select additional options. Examiner notes that there are no limitations within the claim that associate any further functional control with the buttons. Narui, Fukumoto, Naito, and McLaughlin do not expressly teach a magic bright, preference, upgrade, technical, asset ID, and version button. The statement that it is common to include additional buttons on a main menu for providing functional operations as well as display descriptive information about the application being used is taken to be admitted prior art because Applicant has failed to traverse the Examiner's assertion of official notice. See MPEP 2144.03 C. The additional buttons would provide a user intuitive method of selecting a function of the program. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the additional buttons on the menu, since Applicant admits that it is common to include additional buttons on a main menu

for providing functional operations as well as display descriptive information about the application being used.

15. Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2) and Applicant's admission of prior art.

15-1. Regarding claim 23, Narui teaches the claim as recited in claim 22. Although Narui teaches a display monitor [*column 2, lines 43-46*], Narui does not expressly teach a scalar to fit the digitalized signal to the size of an LCD panel and transmitting the digitalized signal to a panel driving part operating the LCD panel. The statement that liquid crystal displays (LCD) are commonly used as a display device for computers is taken to be admitted prior art because Applicant has failed to traverse the Examiner's assertion of official notice. See MPEP 2144.03 C. LCDs are lighter in weight than CRT monitors. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an LCD monitor as the display device since Applicant admits that LCD monitors are commonly used as display devices. This would provide a lightweight alternative to the traditional CRT displays. The LCD monitor would inherently comprise an A/D converter, a scalar, a backlight, and a power supply.

15-2. Regarding claim 24, the computer of Narui would inherently have to include a graphic controller and a stored display setting program for carrying out the functions of the program.

15-3. Regarding claim 25, the microprocessor of Narui inherently controls the A/D controller, the scalar, and the panel driving part according to commands from the graphic controller.

15-4. Regarding claim 26, Narui teaches wherein when a user selects an item with an input unit, the display setting program issues a corresponding command to the graphic controller to adjust a corresponding display setting, by disclosing that when a user changes a setting for the display device, a corresponding display setting is changed *[column 4, lines 19-26]*.

16. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narui (U.S. Patent No. 6,278,433 B2) and Arai (Pub. No. US 2003/0197659 A1).

16-1. Regarding claim 27, Narui teaches the claim as recited in claim 22. Narui does not expressly teach the claim wherein the interface employs a Display Data Channel Common Interface. Arai teaches a computer (11) connected to an image display apparatus (13) *[figure 1]*. A two-way communication interface such as DDC-CI may be used *[paragraph 87]*. Using the standard simplifies software and hardware configurations in the PC and the display monitor. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use DDC-CI as an

interface to communicate with the computer, as taught by Arai. This would simplify software and hardware configurations in the PC and the display monitor.

16-2. Regarding claim 28, Narui teaches the claim as recited in claim 22. Narui does not expressly teach wherein the interface employs a Universal Serial Bus (USB). Arai teaches a computer (11) connected to an image display apparatus (13) *[figure 1]*. A two-way communication interface such as USB may be used *[paragraph 87]*. Using the standard simplifies software and hardware configurations in the PC and the display monitor. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use USB as an interface to communicate with the computer, as taught by Arai. This would simplify software and hardware configurations in the PC and the display monitor.

Response to Arguments

17. The Examiner acknowledges the Applicant's amendments to claims 1 and 22. Regarding independent claim 1, the Applicant alleges that Narui (U.S. Patent No. 6,278,433 B2), as described in the previous Office action, does not explicitly teach executing the display setting program according to a user. Contrary to Applicant's arguments, a setup wizard window is invoked when a user either boots up the computer system or when the user has changed a monitor parameter *[column 3, lines 15-23, 24-32; figure 3]*. Therefore a user must initiate the sequence by either booting up the computer or changing a monitor parameter.

Regarding dependent claim 9, Applicant alleges that Narui, Fukumoto et al (Pub. No. US 2002/0054146 A1), Naito (U.S. Patent No. 6,693,629 B1), and McLaughlin et al (U.S. Patent No. 5,739,809) do not explicitly teach a display button corresponding to a first setting group including a resolution setting, a brightness setting, a contrast setting, and a clock and phase setting; a geometry button corresponding to a second setting group including a position setting; and a color button corresponding to a third setting group including a calibration setting, and a color temperature setting, wherein when each menu button is selected, a window to adjust the display setting belonging to the corresponding setting group is opened. Contrary to Applicant's arguments, Fukumoto teaches an adjusting scheme using a customizable menu hierarchy, wherein hierarchical menus, each for classifying adjustable items in accordance with the type of the items, are sequentially displayed on a screen so that adjustment values for the displayed adjustable items can be appropriately set and changed, wherein a customized menu comprising adjustable items arbitrarily selected and registered by a user can be added to and deleted from the hierarchical menus [*Fukumoto, paragraph 8*]. Thus, adjustable settings for a display device may be presented in categorized menus. As shown in [*Fukumoto, figure 2*], separate menus are displayed that relate to the display (image quality) and geometry (image quality mode) of the display device. Providing the customizable hierarchical menu and grouping the settings in this way allows users to select an adjustable setting with an extremely small number of menu operations [*Fukumoto, paragraph 10*]. [*Fukumoto, figures 7A-7C*] show various settings available to

Art Unit: 2100

the user for adjustment. Although Fukumoto teaches a brightness setting, Fukumoto does not expressly teach a resolution setting, contrast setting, and clock and phase setting corresponding to a display button, or a color button corresponding to a third setting group including a calibration setting and a color temperature setting. Narui teaches adjusting display settings of a monitor [*Narui, column 1, lines 46-53*], which include resolution, contrast, and brightness [*Narui, column 3, lines 53 to column 4, line 60*]. Since Fukumoto teaches customizing hierarchical menus for adjusting settings of a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a resolution setting and a contrast setting, as taught by Narui, in the list of selectable settings for the hierarchical menu of Fukumoto. Such a combination yields a predictable result since resolution and contrast are additional display settings that a user may need to adjust a display device. Since users may customize the hierarchical menus, a user would be fully capable of organizing the resolution, brightness, and contrast settings together in a group.

Naito also teaches allowing users to adjust settings for a display device [*Naito, column 2, line 62 to column 3, line 3*] including clock and phase settings [*Naito, column 8, lines 27-31*]. Since Fukumoto teaches customizing hierarchical menus for adjusting settings of a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a clock and phase setting, as taught by Narui, in the list of selectable settings for the hierarchical menu of Fukumoto. Such a combination yields a predictable result since a clock and phase setting is an additional display setting that a user may need to adjust a display device. Since users may

customize the hierarchical menus, a user would be fully capable of organizing the resolution, brightness, contrast, and clock and phase settings together in a group.

McLaughlin teaches a method and apparatus for calibrating a display device *[McLaughlin, column 1, lines 10-16]*. A color button item relating to adjusting color is provided *[McLaughlin, figure 3; column 9, line 56 to column 11, line 7]*. Since Fukumoto teaches customizing hierarchical menus for adjusting settings of a display device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a color button item including a calibration and color temperature setting, as taught by McLaughlin. This would provide the user with an additional setting for adjusting the display device.

Applicant states that dependent claims 2-21, 23-28, and 30 recite all the limitations of the independent claims, and thus, are allowable in view of the remarks set forth regarding independent claims 1, 22, and 29. However, as discussed above, Narui is considered to teach claims 1, 22, and 29, and consequently, claims 2-21, 23-28, and 30 are rejected.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN H. TAN whose telephone number is (571)272-8595. The examiner can normally be reached on Mon-Fri 10:00-6:30.

Art Unit: 2100

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on 571-272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHT
Assistant Examiner
Art Unit 2173

/DENNIS-DOON CHOW/
Supervisory Patent Examiner, Art Unit 2173